

ABSTRACT

Particulate silica is prepared by feeding a gas
5 mixture of an organohalosilane gas, a flammable gas capable
of generating water vapor when burned, and a free oxygen-
containing gas to a reaction chamber through a multiple-tube
burner, whereby the organohalosilane is subjected to flame
hydrolysis and oxidation reaction. The amount of the
10 flammable gas fed is 0.5-9 mol per mol of the
organohalosilane and such that the amount of water vapor
resulting from combustion of the flammable gas is 1-6 times
the stoichiometric amount, and the gas mixture is fed to the
center tube of the burner such that it may have a linear
15 velocity at the outlet of 50-120 m/sec, calculated in the
standard state. The resulting silica has a surface area of
100-400 m²/g and a narrow particle size distribution of
primary particles and ensures the transparency of silicone
rubber filled therewith.